Physical Description:

The M28 CPE is a highly transportable COLPRO system used exclusively with the Tent. Extendable, Modular, Personnel (TEMPER). The modular Liner Sections "zip" together to configure a variety of protective areas. Exterior straps attach the liners to the TEMPER frame. Internal straps provide support for cloth liners, electrical wiring and lights. Motor Blower Assemblies pressurize the liners to take on the shape of the TEMPER. Each motor blower provides 200 CFM airflow through a Hermetically Sealed Filter Canister (HSFC) before it is ducted into the protected area. A collapsible Protective Entrance (PE) attaches to the liner and serves as an airlock for personnel entry/exit. A collapsible Tunnel Airlock Litter Patient (TALP) provides an entry/exit capability for litter-borne patients. The Support Kit contains the motor blower assembly and ancillary equipment used in the set-up and operation of the system. A Recirculation Filter, located inside the liner near the PE, provides an extra margin of agent filtration.

<u>Vestibule Liners</u> allow interconnection of liner systems to enlarge the protective area. Used in combination with ISO Adapters, vestibule liners allow the addition of ISO shelters to the protective area. Also available is a <u>Supply Airlock</u>, which provides a capability to bring palletized supplies or large equipment into the protective area.

Liner Sections are available in non-Type II and Type II zipper configurations. These two liner types are not interchangeable.

Use/Function:

The M28 CPE is an inflatable shelter system used exclusively with the TEMPER for a variety of applications so personnel can perform their duties unencumbered by individual protective equipment. Its modular liner sections and airlocks allow for a variety of shelter complex configurations and entry/exit capabilities.

Background:

The basic M20 SCPE was developed and type classified in Jun 86. A Pre-planned Product Improvement (P3I) Program generated the M20A1 SCPE and six M28 CPE configurations. The M28 CPE was type classified in Dec 92.

M28 CPE Ordering Data

Systems:

M28 CPE, 16 ft	4240-01-330-7807
M28 CPE, 32 ft	4240-01-330-7808
M28 CPE, 48 ft	4240-01-331-2922
M28 CPE, 64 ft	4240-01-331-2923
M28 CPE, Patient Processing Unit	4240-01-330-7809
M28 CPE, 16 ft. Extension	4240-01-348-9751
M28 CPE, Type II	Available as system
M28 CPE, Non-Type II	components only.

System Components:

Liner, End Section	4240-01-330-8882
Liner, End Section, Type II	4240-01-461-5983
Liner, Center Section	4240-01-330-8884
Liner, Center Section, Type II	4240-01-460-9058
Liner, Vestibule	
Liner, Vestibule, Type II	
Liner, ISO Adapter	
Liner, ISO Adapter, Type II	
Supply Airlock	
Supply Airlock, Type II	4240-01-460-9066
Tunnel Airlock Litter Patient	
Protective Entrance	
Support Kit	
Motor Blower Assembly	
Maintenance Kit	
Filter, Gas-Particulate (HSFC)	
Recirculation Filter	
Filter Element	
Tent Pole	
1 CHE 1 CIC	00-10 01-400-3002

Technical Manual Available

TM 3-4240-338-12&P Operator's and Unit Maintenance Manual Including Repair Parts and Special Tools
List: Collective Protection Equipment: M28

For Additional Information, Contact:

Item Manager: Soldier, Biological and Chemical Command

Attn: AMSSB-HB (RI), Rock Island, IL 61299-7390 Phone: (309) 782-4265 or (309) 782-5455

Priorie. (309) 702-4203 01 (309) 702-3433

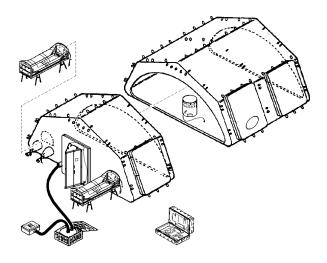
Materiel Developer: Edgewood Chemical Biological Center Attn: AMSSB-REN-P, APG, MD 21010-5424 Phone: (410) 436-5767 or (410) 436-5512

Or Email:

colproteam@sbccom.apgea.army.mil



M28 Collective Protection Equipment (CPE)



NBC protection for Medical, Billeting, Command & Control and Rest & Relief applications

System Characteristics:

- Transportable by truck or aircraft.
- System components are two-man portable.
- Modular component design for easy assembly and maintenance in a variety of shelter configurations.
- Liquid chemical agent resistant liner sections provide ~320 sq. ft. of useable floor space each.
- Vestibule liners and ISO adapters (not shown) allow interconnection of liners and ISO shelters.
- Collapsible, pressurized PE provides entry/exit capability for ambulatory personnel.
- Collapsible, pressurized TALP provides entry/exit capability for litter-borne patients.
- A 16 ft x 20 ft Supply Airlock (not shown) available for entry/exit of palletized supplies or large equipment.
- Differential pressure gages indicate pressure in the airlocks and protective area during operation and entry/exit.
- Power cable connects to standard generator set.
 Also operates on 110 VAC / 60 Hz or European 220 VAC / 50 Hz power with adapters.
- Motor Blower Assembly provides 200 CFM airflow through HSFC into protective area and airlocks.
- Blower motors have 550 hours operating life.
- Can be operated in a bypass mode without HSFC when system is used for training.
- Support Kit includes motor blower assembly, air ducts, power cables/adapters, and repair tape and patches for system set-up and maintenance.
- Recirculation Filter provides ~500 CFM airflow to minimize contamination transfer during entry/exit.
- 5-year extendable shelf-life.

Mission Capabilities:

- Strike and erect in conjunction with TEMPER with no additional personnel required.
- Entry/exit purge times: 3-minutes for PE; 1-minute for TALP; and 55-minutes for Supply Airlock.
- Operable in non-pressurized (non-CB) mode.
- No gas-particulate filter (HSFC) change-out needed during a 72-hour mission.

Special Limitations: M28 CPE does not provide

- Environmental control equipment.
- A portable source of electrical power (generator).
- NBC detection/warning devices.
- Protection from nuclear radiation, though it does provide protection from radioactive particles.

M28 CPEComponents and Features



System Power Requirements

14 W

300 W

1654 W 110/220 VAC

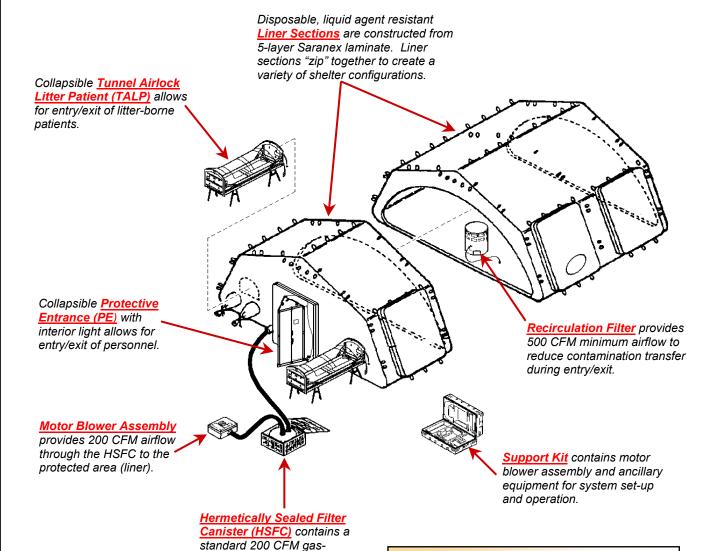
28 VAC

110 VAC

Motor Blower Assembly

Recirculation Filter

PE Light



particulate filter set to filter

the ambient air.